SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

RIO GRANDE BASIN

March 1, 1938

The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by the Bureau of Agricultural Engineering of the U. S. Department of Agriculture, in cooperation with other Federal Bureaus, State Departments, and local organizations. 1/

Precipitation on the watershed of the Rio Grande in Colorado and New Mexico has been considerably below normal during the period from October 1 to March 1, the deficiency being about 0.7 inch. The precipitation on the watersheds of the Canadian and San Juan Rivers was also less than normal and the deficiency was about 0.9 inch. Normal precipitation occurred on the watershed of the Gila and on the Pecos it was above normal because of heavy storms in the extreme southern portion of the watershed. Precipitation during February was generally above normal over New Mexico but below normal in the San Luis Valley in Colorado.

The snow cover on the watershed of the Rio Grande in Colorado and New Mexico is 30 percent less than it was last year at this time. Most of the deficiency occurred in New Mexico but the snow fall in the San Luis Valley also, was less than last year. The snow cover on the watershed of the Canadian is considerably less than it was on March 1, 1937. Unless conditions improve during the next two months the summer flow of these streams will be below normal.

Reservoir storage on the upper Rio Grande is about 75 percent of what it was on March 1, 1937. The Elephant Butte Reservoir on the Lower Rio Grande has 1,219,700 acre feet in storage which is 50 percent more than it was last year at this time. Storage in the El Vado Reservoir at the present time is 40 percent less than it was last year. The moisture content of the soil is normal in the Lower Rio Grande Valley and fairly good in the San Luis Valley.

Summary of Federal and State Cooperative Snow Surveys
Bureau of Agricultural Engineering, U. S. Dept. Agr.; Forest Service; Colo. Agri. Expt. Station
Issued Mar. 9, 1938. Colo. Expt. Station, Fort Collins, Colo.

No.	Main Drainage and Snow Course	Local Drainage	Location			Elev.	National Forest	Mar. 1 Snow Course Measurements					
			State	Locality	Description			Av. Snow Depth			Av. Water Content		
								1936	1937	1938	1936	1937	1938
								in.	in.	in.	in.	in.	in.
	RIO GRANDE												
26.	Wolf Creek Pass	South Fork	Colo.	Wolf Cr. Pass	4-37N-2E	10000	Rio Grande	—	98.7	76.9	—	31.4	22.9
27.	Upper Rio Grande	Rio Grande	"	Rio Grande Res.	13-40N-4W	9350	" "	—	30.7	24.9	—	6.9	5.4
28.	Cumbres Pass*	Los Pinos R.	"	Cumbres Pass	17-32N-5E	10000	" "	—	77.3	64.2	—	28.9	22.3
74.	LaVeta Pass No.2	San. Cristo Cr.	"	LaVeta Pass	22-28S-70W	9300	Off Forest	—	25.5	----	—	5.7	----
47.	Silver Lakes	Alamosa R.	"	1mi.S.Silver L.	15-36N-5E	9600	Rio Grande	—	26.4	23.3	—	5.5	5.3
49.	River Springs	Conejos R.	"	10mi.W.Mogote	25-33N-6E	9300	" "	—	37.4	29.2	—	10.4	7.3
1.	Red River	Red River	N.Mex.	4mi.SW Red R.	29-28N-15E	9500	Carson	—	42.8#	17.7	—	11.4#	4.9
2.	Taos Canon	Rio de Taos	"	15mi.E.Taos	10-25N-15E	9000	"	—	26.9	8.3	—	7.4	2.8
3.	Holman Hill	Rio Pueblo	"	13mi.NE Penasco	10-22N-14E	9400	"	—	4.5	----	—	1.0	----
4.	Aspen Grove	Rio En Medio	"	9mi. NE Santa Fe	12-18N-10E	9100	Santa Fe	—	18.8	6.8	—	4.4	1.7
5.	Lee Ranch	Jemez Cr.	"	6mi.NW Bland	3-18N-4E	9050	" "	—	29.2	15.5	—	6.6	3.6
6.	Canjilon	Canjilon Cr.	"	8mi.NE Canjilon	4-26N-6E	9500	Carson	—	53.9#	40.7	—	20.0#	12.7
7.	Rio Nutrias	Rio Nutrias	"	10mi.S.ParkView	6-27N-5E	7900	"	—	20.9	10.8	—	6.3	4.2
8.	Panchuela	Panchuela Cr.	"	2mi.N.Cowles	34-19N-12E	8500	Santa Fe	—	9.0	2.4	—	3.1	1.4
9.	Hematite Park*	Red River	"	7mi.NW.Therma	8-28N-15E	9500	Carson	—	22.3	13.5	—	7.0	4.1
12.	Tres Ritos	Aqua Piedra	"	7mi.W.Holman	23-22N-13E	9000	"	—	----	7.7	—	----	2.7
	CANADIAN												
9.	Hematite Park	Morena Cr.		7mi.NW Therma	8-28N-15E	9500	Carson	—	22.3	13.5	—	7.0	4.1
10.	Ocate Mesa	Ocate Cr.		3mi.SE Black L	25-24N-16E	9200	Off Forest	—	----	6.2	—	----	1.6

1/ The snow measurements are made principally by field personnel of the U. S. Forest Service and Colorado State Engineer. This work is otherwise conducted cooperatively with the State Engineers of Colorado and New Mexico, U. S. Weather Bureau, Colorado Agricultural Experiment Station, and various municipalities, irrigation associations and others.

*On adjacent drainage
#March 15, 1937